



# Mineral Industry Surveys

---

**For information, contact:**

John F. Papp, Acting Molybdenum Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4963, Fax: (703) 648-7757  
E-mail: [jpapp@usgs.gov](mailto:jpapp@usgs.gov)

Barbara J. McNair (Data)  
Telephone: (703) 648-7952  
Fax: (703) 648-7975

**Internet:** <http://minerals.usgs.gov/minerals>

## MOLYBDENUM IN JULY 2002

Domestic production of molybdenum in concentrate in July 2002 was about 7% more than that of the previous month and was 20% more than that of July 2001, according to the U.S. Geological Survey. Producer stocks of molybdenum in concentrate, oxide, and other product forms were 9,820 metric tons at the beginning of 2002, and 5,700 metric tons at the end

of July.

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, plus U.S. consumption, by end use, and stocks, of molybdenum material in June and July 2002; also included are trade data for May and June 2002.

TABLE 1  
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS 1/

(Metric tons, contained molybdenum)

	2001	2002		
	January- December	June	July	Year to date
Production	37,600	2,670	2,860	17,700
Shipments: 2/				
Domestic	20,700	1,630	2,170	12,800
Export	16,300	993	757	6,100

1/ Data are rounded to no more than three significant digits.

2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 2  
U.S. REPORTED PRODUCTION AND SHIPMENTS OF MOLYBDENUM  
PRODUCTS 1/

(Metric tons, contained molybdenum)

	2001	2002		
	January- December	June	July	Year to date
Gross production	40,300	2,060 r/	2,030	16,000
Internal consumption 2/	24,600	1,070	1,150	10,500
Gross shipments	32,600	2,590 r/	2,140	16,100

r/ Revised.

1/ Data are rounded to no more than three significant digits.

2/ Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 3  
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb- denum 2/	Ammonium and sodium molybdate	Molyb- denum scrap	Other	Total
2002, June:						
Steel:						
Carbon	11,000	24,600	--	--	1,810	37,400
High-strength low-alloy	25,600 r/	7,950 r/	--	--	11,300	44,900 r/
Stainless and heat-resisting	149,000	42,500	--	--	8,520	200,000 r/
Full alloy	99,900 r/	148,000 r/	--	--	2,580	251,000 r/
Tool	59,800	W	--	--	1,450	61,300 r/
Total	346,000 r/	223,000 r/	--	--	25,700	595,000 r/
Cast irons (gray, malleable, and ductile iron)	W	14,400	--	--	W	14,400 r/
Superalloys	39,900	W	--	(3/)	72,300	112,000 r/
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	W	2,360	--	--	6,350	8,700 r/
Mill products made from metal powder 4/	--	--	--	--	88,600 r/	88,600 r/
Cemented carbides and related products 5/	--	--	--	--	6	6
Chemical and ceramic uses:						
Pigments	--	--	W	--	W	W
Catalysts	77,300	--	W	--	W	77,300
Other	--		1,920 r/	--	875	2,800 r/
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	14,700	14,700 r/
Other	1,840	17,900	75,300	--	14,900	110,000 r/
Grand total	465,000 r/	258,000 r/	77,200 r/	--	223,000 r/	1,020,000 r/
Stocks, June 30, 2002	363,000 r/	165,000 r/	4,650 r/	33,800	870,000 r/	1,440,000 r/

See footnotes at end of table.

TABLE 3--Continued  
U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS 1/

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molybdenum 2/	Ammonium and sodium molybdate	Molybdenum scrap	Other	Total
2002, July:						
Steel:						
Carbon	11,600	34,300	--	--	W	45,900
High-strength low-alloy	24,700	12,200	--	--	W	36,900
Stainless and heat-resisting	199,000	55,000	--	--	8,150	262,000
Full alloy	114,000	138,000	--	--	2,870	255,000
Tool	56,400	W	--	--	14,600	71,100
Total	406,000	240,000	--	--	25,600	671,000
Cast irons (gray, malleable, and ductile iron)	W	13,500	--	--	W	13,500
Superalloys	34,100	W	--	(3/)	98,700	133,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	75	2,310	--	--	6,350	8,730
Mill products made from metal powder 4/	--	--	--	--	59,100	59,100
Cemented carbides and related products 5/	--	--	--	--	3	3
Chemical and ceramic uses:						
Pigments	W	--	W	--	W	W
Catalysts	77,300	--	W	--	W	77,300
Other	--	13,100	17,400	--	--	30,500
Miscellaneous and unspecified uses:	--					
Lubricants	--	--	--	--	14,900	14,900
Other	1,090	--	75,300	--	875	77,300
Grand total	518,000	269,000	92,800	--	206,000	1,090,000
Stocks, July 31, 2002	436,000	222,000	3,760	37,900	859,000	1,560,000

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes calcium molybdate.

3/ Included in "Other" of the "Superalloys" category.

4/ Includes ingot, wire, rod, and sheet.

5/ Includes construction, mining, oil and gas, metal working machinery.

TABLE 4  
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES  
(including roasted concentrate), BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	2001	2002		
	January-December	May	June	Year to date
Australia	147,000	--	3,000	24,000
Belgium	3,380,000	157,000	244,000	2,520,000
Brazil	30,100	4,860	295	17,400
Canada	650,000	70,300	119,000	535,000
Chile	11,800	1,210	7,000	11,900
China	201,000	--	--	32,900
Germany	512,000	--	--	58,700
India	294,000	45	22,700	136,000
Italy	95,000	--	--	47,900
Japan	1,700,000	83,400	74,000	644,000
Korea, Republic of	29,200	6,080	6,250	55,100
Mexico	764,000	2,400	62,100	179,000
Netherlands	13,500,000	427,000	361,000	3,220,000
Spain	63,400	2,380	--	38,300
Sweden	48,200	--	--	24,300
Taiwan	6,320	--	3,700	7,490
United Kingdom	6,210,000	386,000	306,000	2,530,000
Other	181,000	--	--	134,000
Total	27,800,000	1,140,000	1,210,000	10,200,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY 1/

(Kilograms, contained molybdenum)

Country	2001	2002		
	January- December	May	June	Year to date
Australia	599	--	--	--
Canada	442,000	38,800	42,600	259,000
Chile	--	--	--	240
China	11,500	--	--	--
Germany	111,000	--	--	--
Korea, Republic of	876	--	--	--
Mexico	50,300	17,700	6,920	29,700
Netherlands	12,600	--	--	--
Taiwan	--	274	--	274
Total	629,000	56,800	49,500	290,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS 1/

(Kilograms, unless otherwise specified)

Material	January-December 2001			June 2002		
	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.) (thousands)
Ore and concentrates roasted	9,470,000	6,000,000	\$32,900	659,000	409,000	\$3,000
Ore and concentrates other	10,000	11,600	73	--	--	--
Molybdenum chemicals:						
Oxides and hydroxides	1,010,000	NA	5,530	123,000	NA	709
Molybdates of ammonium	2,740,000	1,610,000	15,100	80,900	45,400	376
Molybdates (all others)	318,000	113,000	1,050	35,000	197	110
Molybdenum orange	1,120,000	NA	5,180	110,000	NA	543
Ferromolybdenum	5,570,000	3,580,000	21,400	666,000	436,000	4,010
Molybdenum powders	172,000	163,000	3,390	3,000	2,950	59
Molybdenum unwrought	24,700	24,400	267	--	--	--
Molybdenum waste and scrap	775,000 r/	714,000 r/	7,140 r/	--	--	--
Molybdenum wire	16,900	NA	1,080	--	--	--
Molybdenum other	14,400	NA	1,940	738	NA	134
Total	21,200,000	12,200,000	95,100	1,680,000	893,000	8,940

r/ Revised. NA Not available. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.